

Listing of Claims:

1. *(currently amended)* A startup code, embodied in a computer-readable medium, for protecting a shelled computer program, comprising: a sequence of tasks collectively executing the startup code; and wherein at least one task is selectively performed by a selected one of a plurality of task code variations as selected by a selection code associated with the at least one task.
2. *(previously presented)* The startup code of claim 1, wherein the selected one of the plurality task code variations is pseudorandomly selected.
3. *(previously presented)* The startup code of claim 1, wherein the selected one of the plurality of task code variations are selected based on a function of time.
4. *(previously presented)* The startup code of claim 1, wherein the selected one of the plurality of task code variations is selected based on a function of one or more parameters describing a computer executing the startup code.
5. *(previously presented)* The startup code of claim 4, wherein the one or more parameters includes a computer fingerprint.

6. *(previously presented)* The startup code of claim 1, wherein a second task of the sequence of tasks is selectively performed by a selected one of a plurality of second task code variations as selected by a second selection code associated with second task.

7. *(currently amended)* The startup code of claim 1, wherein a second task of the sequence of tasks is selectively performed by a selected one of a plurality of second task code variations as selected by a second selection code associated with the selected one of the plurality of second task code variation variations.

8. *(previously presented)* The startup code of claim 7, wherein the selected one of the plurality of second task code variations is pseudorandomiy selected.

9. *(previously presented)* The startup code of claim 7, wherein the selected one of the plurality of second task code variations is selected based on a function of time.

10. *(previously presented)* The startup code of claim 7, wherein the selected one of the plurality of second task code variations is selected based on a function of one or more parameters describing a computer executing the startup code.

11. *(previously presented)* The startup code of claim 10, wherein the one or more parameters includes a computer fingerprint.

12. (*currently amended*) A startup code, embodied in a computer-readable medium, for protecting a shelled computer program, comprising: a plurality N of startup code tasks T₁, T₂, ... T_N to be performed to execute the startup code;

a plurality K of startup task code variations T_{i,1}, T_{i,2}, ... , T_{i,K} for at least one T_i of the plurality startup code tasks T₁, T₂, ... T_N; and

a selection routine S_i for the at least one T_i of the plurality of startup code tasks T₁, T₂, ... T_N, the selection routine S_i for selecting at least one T_{i,j} of the K plurality of code variations T_{i,1}, T_{i,2}, ... , T_{i,K} from among the plurality of code variations T_{i,1}, T_{i,2}, ... , T_{i,K}

13. (*previously presented*) The startup code of claim 12, wherein the startup code tasks are to be performed in series.

14. (*previously presented*) The startup code of claim 12, wherein the selection routine pseudorandomly selects the one of the plurality of code variations from among the plurality of code variations.

15. (*previously presented*) The startup code of claim 12, wherein the selection routine selects one of the plurality of code variations from among the plurality of code variations according to a function of time.

16. (*previously presented*) The startup code of claim 12, wherein the selection routine selects one of the plurality of code variations from among the plurality of code variations according to a function of one or more parameters describing a computer executing the startup code.

17. (*previously presented*) The startup code of claim 16, wherein the one or more parameters includes a computer fingerprint.

18. (*previously presented*) The startup code of claim 12, further comprising:
a plurality K of second selection routines $S_{i+1,1}, S_{i+1,2} \dots S_{i+1,K}$ each second selection routine $S_{i+1,1}, S_{i+1,2}, \dots S_{i+1,K}$ associated with and executed after one of the plurality of startup code variations $T_{i,K}$, and each second selection routine $S_{i+1,1}, S_{i+1,2}, \dots S_{i+1,K}$ for selecting at least one of a plurality of L second startup code variations $T_{i+1,1}, T_{i+1,2}, \dots, T_{i+1,L}$, for a second startup code task T_{i+1} of the plurality of startup code tasks T_1, T_2, \dots, T_N .

19. (*previously presented*) The startup code of claim 18, wherein each of the plurality of second selection routines pseudorandomly selects the one of the plurality of second startup code variations from among the plurality of second startup code variations.

20. (*previously presented*) The startup code of claim 18, wherein each of the plurality of second selection routines selects one of the plurality of second startup code variations from among the plurality of second startup code variations according to a function of time.

21. (*previously presented*) The startup code of claim 18, wherein each of the plurality of second selection routines selects one of the plurality of second startup code variations from among the plurality of second startup code variations according to a function of one or more parameters describing a computer executing the startup code.

22. (*previously presented*) The startup code of claim 21, wherein the one or more parameters includes a computer fingerprint.

23. (*previously presented*) A method of generating a secure startup code for use in generating a shelled application program, comprising the steps of:

generating a plurality N of startup task routines T₁, T₂, ... , T_N collectively forming the startup code;

generating a plurality K of startup task routine variations T_{i,1}, T_{i,2}, ... , T_{i,K} for a chosen startup task routine T_i of the startup task routines T₁, T₂, ... , T_N;

generating a selection routine S_i for the chosen startup task routine T_i of the startup task routines T₁, T₂, ... , T_N, each selection routine S_i for selecting at least one of the startup task code variations T_{i,1}, T_{i,2}, ... , T_{i,K} to perform the chosen startup task routine T_i; and

assembling the secure startup code as a combination of the plurality of task routines T_1 , T_2 , ..., T_N for the unchosen ones of the plurality of task routines, and the selection routine S_i and plurality of task routine variations $T_{i,1}$, $T_{i,2}$, ..., $T_{i,K}$ for each of the chosen task routine T_i of the plurality task routines T_1 , T_2 , ... T_N .

24. *(previously presented)* The method of claim 23, further comprising the step of separating the startup code into a series of task routines T_1 , T_2 , ... T_N .
25. *(previously presented)* The method of claim 23, wherein the selection routine S_i pseudorandomly selects the one of the plurality of startup task routine variations $T_{i,1}$, $T_{i,2}$, .. , $T_{i,K}$
26. *(previously presented)* The method of claim 23, wherein the selection routine S_i selects the one of the plurality of startup routine variations $T_{i,1}$, $T_{i,2}$, ..., $T_{i,K}$ as a function of time.
27. *(previously presented)* The method of claim 23, wherein the selection routine S_i selects the one of the plurality of startup routine variations $T_{i,1}$, $T_{i,2}$, ..., $T_{i,K}$ as a function of one or more parameters describing a computer executing the startup code.
28. *(previously presented)* The method of claim 27, wherein the one or more parameters includes a computer fingerprint.

29. (*previously presented*) The method of claim 23, wherein:

the method further comprises the steps of generating a plurality K second selection routines, each second selection routine $S_{i+1,1}, S_{i+1,2}, \dots, S_{i+1,K}$ associated with and executed after one of the plurality of startup code variations $T_{i,K}$, and each second selection routine $S_{i+1,1}, S_{i+1,2}, \dots, S_{i+1,K}$ for selecting at least one of a plurality of L second startup code variations $T_{i+1,1}, T_{i+1,2}, \dots, T_{i+1,L}$ for a second startup task routine T_{i+1} of the plurality of startup task routines T_1, T_2, \dots, T_N ; and

the secure startup code is assembled as a combination of the plurality of task routines for the unchosen ones of the plurality of task routines T_1, T_2, \dots, T_N , the selection routine S_i and plurality of task routine variations $T_{i,1}, T_{i,2}, \dots, T_{i,L}$ for each of the chosen ones of the task routines T_1, T_2, \dots, T_N , and the second selection routines $S_{i+1,1}, S_{i+1,2}, \dots, S_{i+1,K}$, and second startup code variations $T_{i+1,1}, T_{i+1,2}, \dots, T_{i+1,L}$.

30. (*previously presented*) A method of executing a secure startup code comprising the steps of: selecting a startup task code variation from among a plurality of startup task code variations, each startup code task variation performing a startup code task differently than the other startup code task variations, the startup code task belonging to a sequence of startup code tasks collectively performing the startup code; and
executing the selected stamp task code variation.

31. (*previously presented*) The method of claim 30, wherein the startup task code variation is pseudorandomly selected.

32. (*previously presented*) The method of claim 30, wherein the startup task code variation is selected based on a function of time.

33. (*previously presented*) The method of claim 30, wherein the startup task code is selected as a function of one or more parameters describing a computer executing the startup code.

34. (*previously presented*) The method of claim 33, wherein the one or more parameters includes a computer fingerprint.

35. (*previously presented*) The method of claim 30 above, further comprising the steps of: selecting a second startup task code variation from among a plurality of second startup task code variations, each second startup code task variation performing a second startup code task differently than the other second startup code task variations, the second startup code task belonging to the sequence of startup code tasks collectively performing the startup code; and executing the selected second startup task code variation.

36. (*previously presented*) The method of claim 35, wherein the step of selecting the second startup task code variation is performed by executing a selection routine associated each of the startup code task variations and the second startup code task variations.

37. (*currently amended*) The method of claim 35, wherein the step of selecting the second startup task code variation is performed by executing a selection routine associated with the selected startup task code variation and the second startup task code variations.